

## EAST Search History

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
S1	30	(UBM or (under near2 metallurgy)) and (adhesi\$2 same barrier) and (Ni near Ti)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/11/06 19:13
S2	18	(UBM or (under near2 (metallization or metallurgy)) or BLM) and ("Ni-Ti" or "Ti-Ni" or "tin-nickel")	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/11/06 19:11
S3	19	(UBM or (under near2 (metallization or metallurgy)) or BLM) and ("Sn--Ni" or "Sn-Ni" or "tin-nickel" or (Sn near Ni))	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/11/06 19:13
S4	6	(UBM or (under near2 metallurgy)) and (adhesi\$2 same barrier) and (Ni near Sn)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/11/06 19:13
S5	9	("20020093096"   "20030013290"   "5470787"   "6127736"   "6163463"   "6224690"   "6492197"   "6501185").PN. OR ("6642079").URPN.	US-PGPUB; USPAT; USOCR	OR	ON	2006/11/06 19:20
S6	66	("5059553"   "5108027"   "5130779"   "5133495"   "5137845"   "5147084"   "5162257"   "5208186"   "5268072"   "5269453"   "5310699").PN. OR ("5470787").URPN.	US-PGPUB; USPAT; USOCR	OR	ON	2006/11/06 19:36
S7	11	("5220199"   "5470787"   "5656858"   "5686760"   "5731624"   "5767010"   "5904556"   "6187680"   "6255151").PN. OR ("6713381").URPN.	US-PGPUB; USPAT; USOCR	OR	ON	2006/11/06 19:49

## EAST Search History

S8	76	("3663184"   "3839727"   "4042954"   "4237607"   "4273859"   "4293637"   "4513905"   "4661375"   "4840302"   "4950623"   "5108950"   "5130779"   "5134460"   "5162257"   "5234149"   "5268072"   "5272111"   "5277756"   "5289631"   "5293006"   "5296407"   "5298459"   "5391521"   "5440167"   "5459087"   "5470787"   "5498573").PN. OR ("5767010").URPN.	US-PGPUB; USPAT; USOCR	OR	ON	2006/11/06 20:15
S9	505	(UBM or (under near3 (metallurgy or metallization)) or BLM or PLM or (solder near2 (ball or bump))) and (barrier with (Sn near2 Ni) or (tin near nickel)))	US-PGPUB; USPAT; USOCR	OR	ON	2006/11/06 20:18
S10	36	(UBM or (under near3 (metallurgy or metallization)) or BLM or PLM or (solder near2 (ball or bump))) and (barrier with ((Sn near2 Ni) or (tin near nickel)))	US-PGPUB; USPAT; USOCR	OR	ON	2006/11/07 09:56
S11	541	(UBM or (under near3 (metallurgy or metallization)) or BLM or PLM or (solder near2 (ball or bump))) and (("Sn-Ni") or (tin near nickel)))	US-PGPUB; USPAT; USOCR	OR	ON	2006/11/07 10:54
S12	70	(UBM or (under near3 (metallurgy or metallization)) or BLM or PLM or (solder near2 (ball or bump))) and (("Sn-Ni") or ("tin-nickel"))	US-PGPUB; USPAT; USOCR	OR	ON	2006/11/07 10:52
S13	18	("20010013652"   "20010025723"   "4840302"   "5118029"   "5162257"   "5384090"   "5514334"   "5514912"   "5553769"   "5668058"   "5747881"   "5821627"   "5859470"   "5902686"   "6218281"   "6232212"   "6236112"   "6265300").PN. OR ("6486553").URPN.	US-PGPUB; USPAT; USOCR	OR	ON	2006/11/07 10:09
S14	79	(UBM or (under near3 (metallurgy or metallization)) or BLM or PLM or (solder near2 (ball or bump))) and (intermetallic with ((Sn near3 Ni) or (tin near2 nickel)))	US-PGPUB; USPAT; USOCR	OR	ON	2006/11/07 10:56
S15	9	("20020093096"   "20030013290"   "5470787"   "6127736"   "6163463"   "6224690"   "6492197"   "6501185").PN. OR ("6642079").URPN.	US-PGPUB; USPAT; USOCR	OR	ON	2006/11/07 10:55

## EAST Search History

S16	79	((under or underbump) near3 (metallurgy or metallization)) or UBM or BLM or PLM or (solder near2 (ball or bump))) and (intermetallic with ((Sn near3 Ni) or (tin near2 nickel)))	US-PGPUB; USPAT; USOCR	OR	ON	2006/11/07 10:57
S17	6	"820855".ap.	US-PGPUB; USPAT; USOCR	OR	ON	2006/11/08 18:33
S19	1	"5665639".pn.	US-PGPUB; USPAT; USOCR	OR	ON	2006/11/07 16:13
S20	3	(bond\$3 near2 pad) same ("Sn-Ni" or SnNi or NiSn or "Ni-Sn" or "tin-nickel" or "nickel-tin") and (passivat\$3 or dielectric or insulat\$3)	US-PGPUB; USPAT; USOCR	OR	ON	2006/11/07 16:18
S21	70	(bond\$3 near2 pad) and ("Sn-Ni" or SnNi or NiSn or "Ni-Sn" or "tin-nickel" or "nickel-tin") and (passivat\$3 or dielectric or insulat\$3)	US-PGPUB; USPAT; USOCR	OR	ON	2006/11/07 16:56
S22	54	(bond\$3 near2 pad) and (intermetallic or "inter-metallic") with ((Sn near2 Ni) or (Tin near Nickel))	US-PGPUB; USPAT; USOCR	OR	ON	2006/11/07 17:39
S23	0	(redistribution) same ((intermetallic or "inter-metallic") with ((Sn near2 Ni) or (Tin near Nickel)))	US-PGPUB; USPAT; USOCR	OR	ON	2006/11/07 17:39
S24	0	(redistribut\$3) same ((intermetallic or "inter-metallic") with ((Sn near2 Ni) or (Tin near Nickel)))	US-PGPUB; USPAT; USOCR	OR	ON	2006/11/07 17:44
S25	14	(redistribut\$3) same ((Sn near2 Ni) or (Tin near Nickel))	US-PGPUB; USPAT; USOCR	OR	ON	2006/11/07 17:44
S26	17	(redistribut\$3) and ((intermetallic or "inter-metallic") with ((Sn with Ni) or (Tin with Nickel)))	US-PGPUB; USPAT; USOCR	OR	ON	2006/11/07 17:47
S27	66	(redistribut\$3) same ((Sn with Ni) or (Tin with Nickel))	US-PGPUB; USPAT; USOCR	OR	ON	2006/11/07 18:07
S28	56	(UBM or BLM or (solder near (ball or bump))) and ((redistribut\$3) with (multi-layer or multilayer))	US-PGPUB; USPAT; USOCR	OR	ON	2006/11/07 18:09

## EAST Search History

S29	6083	257/751,778,779,766.ccls.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/11/08 10:52
S30	6949	438/108,612-615.ccls.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/11/08 10:52
S31	3568	257/737-738.ccls.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/11/08 10:52
S32	6	"079876".ap.	US-PGPUB; USPAT; USOCR	OR	ON	2006/11/08 18:33